



Disruptive Analysis

Don't Assume

The evolution of SIP- and IMS-capable mobile handsets

The end-user battleground for operator IMS services & disruptive new entrants

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Highlights

- Although many operators are deploying IMS networks now, it is highly likely that IMS phones will be late-to-market, and suffer from poor user experience.
- There is little consensus on the answer to “What exactly is an IMS phone?”
- Existing standards are too protocol-focused and are insufficient to define how IMS phones should “behave”, e.g. how IMS & non-IMS applications interact.
- Handsets with basic IMS capabilities (often operator-proprietary) will start to ship in small quantities in late 2006 and 2007, although it will be 2009 before 20%+ massmarket penetration is reached, with more standardised handsets.
- Concepts of handset-based “combinational services” and downloadable IMS applications are not yet practical. User interface design and interoperability between multiple vendors’ phones require much more effort & development.
- A good IMS user experience will need handsets capable of full multi-tasking – something which is outside the capabilities of most current phones.
- These problems should be overcome eventually. In 2011, it is forecast that there will be almost 500m IMS-capable phones shipped globally.
- Despite hype around fixed-mobile convergence, WiFi will be present in less than 10% of IMS-capable mobile phones by 2011; most will be cellular-only.
- SIP – an essential basic subcomponent of IMS – is much easier to implement than a full IMS software framework. SIP-capable phones are already shipping.
- There are many interesting non-IMS applications of SIP on mobile phones, such as VoIP, Internet IM, enterprise IP-PBX access, or interactive games.
- In total, 787m SIP-enabled mobile handsets will ship in 2011, of which 40% will be smartphones. Europe will account for 50%+ of SIP handset volume shipments until 2010, although Japan and Korea lead, in penetration terms.
- SIP will be adopted more slowly on CDMA handsets than GSM/UMTS ones.
- “Naked SIP” phones, on which 3rd-party applications can exploit the SIP stack, will grow rapidly in importance, with 48m shipping in 2006, more than 220m in 2008 and 500m+ in 2011. This is a huge threat to mobile operators.
- Naked SIP will be enabled by smartphones OS’s, virtual machines like Java, and the inclusion of “exposed” SIP in many featurephone platforms.
- Although some devices will support both naked SIP and operator-oriented IMS applications, there will be 1 billion more naked SIP handsets shipped, than operator-only “closed IMS” phones, between 2006-2011.
- Internet brands, enterprises, 3rd-party developers and competing service providers will exploit the opportunities from the 1.6 billion “naked SIP” phones that will ship between now and 2011, using on-handset software clients.
- Some operators will attempt to block “parasitic” 3rd-party SIP applications, by “locking” handsets or intercepting network traffic. These attempts will seem clumsy and vindictive, and will likely drive churn and customer disloyalty.
- Mobile operators’ visions of stopping threats from Internet-based brands, 3rd-party VoIP and other services, by locking-down IMS networks and only permitting customers to access IMS-based services, are totally unrealistic.
- A large number of specialist firms are emerging to supply SIP and IMS software for mobile phones. However, many will struggle with integration of their clients into existing OS and application software on handsets.

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About Disruptive Analysis

Disruptive Analysis is a technology-focused advisory firm. Founded by experienced analyst Dean Bubleby in mid-2002, it provides critical commentary and consulting support to wireless companies, telecoms/IT vendors, investors and intermediaries.

Disruptive Analysis focuses on mobile communications, wireless technology and IP networking industry trends, particularly in areas with complex value chains, rapid technical/market evolution, or labyrinthine business relationships. It provides its clients with advice and analytical opinion on topics such as technology business models and go-to-market strategies, "addressable market sizing", planning validation and due diligence.

Currently, the company is focusing on the wireless and mobility marketplace, alongside additional research on networks, VoIP, telecom OSS and enterprise IT. Recently, it has focused on the potential for convergence of cellular, WLAN and fixed communications in a new breed of devices, services and networks. Other hot topics currently being researched include IMS, cellular picocells, WiMAX, in-building wireless, mobile handset software, MVNOs, and VoWLAN products and business models.

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Disruptive Analysis attempts to predict - and validate - the future direction and profit potential of technology markets - based on consideration of many more "angles" than is typical among industry analysts. We take into account new products and technologies, changing distribution channels, customer trends, investor sentiment and macroeconomic status. Disruptive Analysis' motto is "Don't Assume".

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